

In the Claims

1. (Currently Amended) A method for assigning call priority in a packet switched environment, comprising:

receiving a request from an internet protocol phone within the packet switched environment to establish a connection to a dialed number, the internet protocol phone having a wired connection to the packet switched environment;

determining a priority for the connection based on the dialed number;

generating a priority certificate based on the priority;

attaching the priority certificate to the communication packets of the connection; and

establishing the connection based on the priority.

2. (Canceled)

3. (Previously presented) The method of Claim 1, further comprising processing the communication packets based on the priority certificate.

4. (Previously presented) The method of Claim 1, wherein the certificate provides the communication packets with a higher priority to CPU threads processing communication packets for the connection.

5. (Original) The method of Claim 1, further comprising increasing the priority of network voice packets associated with the connection relative to other packets.

6. (Previously presented) The method of Claim 1, wherein the certificate provides the communication packets with a higher priority to access gateway trunks relative to other connections.

7. (Previously presented) The method of Claim 1, wherein the certificate provides the communication packets with a higher priority to access network bandwidth for voice quality relative to other connections.

8. (Original) The method of Claim 1, further comprising notifying network users of a need to make resources available for a high-priority connection.

9. (Previously presented) The method of Claim 1, further comprising:
determining whether adequate resources are available for the connection to maintain a first quality of service level;
if not available, pre-empting other connections to free up resources for the connection; and
establishing the connection using the freed-up resources.

10. (Previously presented) The method of Claim 9, wherein freeing up resources comprises downgrading the quality of service parameters of the other connections.

11. (Original) The method of Claim 9, further comprising notifying affected users that their connections are subject to preemption.

12. (Original) The method of Claim 1, further comprising:
determining if adequate resources are available for the connection; and
if not available, queuing the connection as first to receive resources as they become available.

13. (Original) The method of Claim 1, further comprising queuing higher priority connections; and
pre-empting connections with a lower relative priority.

14. (Previously presented) The method of Claim 9, wherein determining whether adequate resources are available comprising:
determining a path for the connection; and
determining whether adequate resources are available along the path based on the first quality of service level.

15. (Original) The method of Claim 1, further comprising determining resources required to establish the requested connection and provide the connection with priority to the needed resources.

16. (Original) The method of Claim 1, further comprising:
identifying currently established connections using resources required to establish the requested connection; and
pre-empting the connections using the required resources to establish the requested connection.

17. (Original) The method of Claim 1, further comprising monitoring network resources to determine when sufficient resources are available to establish the requested connection.

18. (Currently Amended) The method of Claim 1, further comprising monitoring use by an end-point ~~end-point usage~~ of connections having an augmented priority.

19. (Currently Amended) The method of Claim 18, further comprising modifying the priority of the connection based on the monitored end-point use of connections having an augmented priority ~~end-point usage~~.

20. (Currently Amended) A system for assigning call priority in a packet switched environment, comprising:

a means for receiving a request from an internet protocol phone within the packet switched environment to establish a connection to a dialed number, the internet protocol phone having a wired connection to the packet switched environment;

a means for determining a priority for the connection based on the dialed number;

a means for generating a priority certificate based on the priority;

a means for attaching the priority certificate to the communication packets of the connection; and

a means for establishing the connection based on the priority.

21. (Canceled)

22. (Previously presented) The system of Claim 20, further comprising a means for processing the communications packets based on the priority certificate.

23. (Original) The system of Claim 20, wherein the certificate provides the communication packets with a higher priority to CPU threads processing communication packets for the connection.

24. (Original) The system of Claim 20, further comprising a means for increasing the priority of network voice packets associated with the connection relative to other packets.

25. (Previously presented) The system of Claim 20, wherein the certificate provides the communication packets with a higher priority to access gateway trunks relative to other connections.

26. (Original) The system of Claim 20, wherein the certificate provides the communication packets with a higher priority to access to network bandwidth for voice quality relative to other connections.

27. (Original) The system of Claim 20, further comprising a means for notifying network users of a need to make resources available for a high-priority connection.

28. (Previously presented) The system of Claim 20, further comprising:
a means for determining whether adequate resources are available for the connection to maintain a first quality of service level;
a means for pre-empting other connections if not available; and
a means for establishing the connection using the freed-up resources.

29. (Original) The system of Claim 28, further comprising a means for downgrading the quality of service parameters of other connections.

30. (Original) The system of Claim 28, further comprising a means for notifying affected users that their connections are subject to preemption.

31. (Original) The system of Claim 20, further comprising:
a means for determining if adequate resources are available for the connection; and
a means for by queuing the connection as first to receive resources as they become available, if resources are not available.

32. (Original) The system of Claim 20, further comprising a means for queuing higher priority connections; and
a means for pre-empting connections with a lower relative priority.

33. (Previously presented) The system of Claim 28, wherein the means for determining whether adequate resources are available comprising:
a means for determining a path for the connection; and
a means for determining whether adequate resources are available along the path based on the first quality of service level.

34. (Original) The system of Claim 20, further comprising a means for determining resources required to establish the requested connection and provide the connection with priority to the needed resources.

35. (Original) The system of Claim 20, further comprising:
a means for identifying currently established connections using resources required to establish the requested connection; and
a means for pre-empting the connections using the required resources to establish the requested connection.

36. (Original) The system of Claim 20, further comprising a means for monitoring network resources to determine when sufficient resources are available to establish the requested connection.

37. (Currently Amended) The system of Claim 20, further comprising a means for monitoring use by an end-point ~~end-point usage~~ of connections having an augmented priority.

38. (Currently Amended) The system of Claim 37, further comprising a means for modifying the priority of the connection based on the monitored end-point use of connections having an augmented priority ~~end-point usage~~.

39. (Currently Amended) A system for assigning call priority in a packet switched environment, comprising:

a computer-readable medium encoded with computer executable logic; and

the logic operable to receive a request from an internet protocol phone within the packet switched environment to establish a connection to a dialed number, the internet protocol phone having a wired connection to the packet switched environment, determine a priority for the connection based on the dialed number, generate a priority certificate based on the priority, attach the priority certificate to the communication packets of the connection, and establish the connection based on the priority.

40. (Canceled)

41. (Previously presented) The system of Claim 39, wherein the logic is further operable to process the communication packets based on the priority certificate.

42. (Previously presented) The system of Claim 39, wherein the certificate provides the communication packets with a higher priority to CPU threads associated with the connection.

43. (Previously presented) The system of Claim 39, wherein the logic is further operable to increase the priority of network voice packets associated with the connection relative to other packets.

44. (Previously presented) The system of Claim 39, wherein the certificate provides the communication packets with a higher priority to access gateway trunks relative to other connections.

45. (Previously presented) The system of Claim 39, wherein the certificate provides the communication packets with a higher priority to access network bandwidth for voice quality relative to other connections.

46. (Previously presented) The system of Claim 39, wherein the logic is further operable to notify network users of a need to make resources available for a high-priority connection.

47. (Previously presented) The system of Claim 39, wherein the logic is further operable to:

determine whether adequate resources are available for the connection to maintain a first quality of service level;

pre-empting other connections to free up resources for the connection if not available;
and

establish the connection using the freed-up resources.

48. (Previously presented) The system of Claim 47, wherein freeing up resources comprises downgrading the quality of service parameters of other connections.

49. (Previously presented) The system of Claim 47, wherein the logic is further operable to notify affected users that their connections are subject to preemption.

50. (Previously presented) The system of Claim 39, wherein the logic is further operable to:

determine if adequate resources are available for the connection; and

queue the connection if not available, as first to receive resources as they become available.

51. (Previously presented) The system of Claim 39, wherein the logic is further operable to:

queue higher priority connections; and

preempt connections with a lower relative priority.

52. (Previously presented) The system of Claim 47, wherein logic is further operable to determine whether adequate resources are available comprising logic operable to:

- determine a path for the connection; and
- determine whether adequate resources are available along the path based on the first quality of service level.

53. (Previously presented) The system of Claim 39, wherein the logic is further operable to determine resources required to establish the requested connection and provide the connection with priority to the needed resources.

54. (Previously presented) The system of Claim 39, wherein the logic is further operable to:

- identify currently established connections using resources required to establish the requested connection; and

- preempt the connections using the required resources to establish the requested connection.

55. (Previously presented) The system of Claim 39, wherein the logic is further operable to monitor network resources to determine when sufficient resources are available to establish the requested connection.

56. (Currently Amended) The system of Claim 39, wherein the logic is further operable to monitor use by an end-point ~~end-point-usage~~ of connections having an augmented priority.

57. (Currently Amended) The system of Claim 56, wherein the logic is further operable to modify the priority of the connection based on the monitored end-point use of connections having an augmented priority ~~end-point-usage~~.

58-60. (Canceled)